Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

place in any other species referred to *Hippotherium*. In both these stages the enamel borders of the lakes are more or less plicate, and the posterior loop of the anterior lake is present. With further wear the plications, including the loop, disappear, when the molars agree in their characters with *Protohippus parvulus* Marsh. These observations were based on specimens from the Loup Fork beds of Nebraska, Kansas, Colorado and Texas, where the species is abundant.

The speaker exhibited the molar dentitions of three colts from Wyoming and Texas, and a part of one from Colorado, all from the Loup Fork beds. He showed that these represent the genera *Merychippus, Parahippus, Hypohippus,* and *Anchippus* of Leidy, and six species of the same author. He thought it probable that *Anchippus* belongs to a colt of *Hippotherium*, and *Parahippus* and *Hypohippus* to *Protohippus*, while he was not certain as to the reference of the type of *Merychippus* (*M. insignis*). He pointed out that the characters of the individual temporary molars differ in the different teeth of the series, and also differ at different stages of wear. As with the permanent dentition, in some species the temporary molars are always simple, while in others the enamel borders are more complex. In the latter case the pattern becomes more simple in some respects with prolonged wear. He was able to correlate the temporary and permanent dentitions of *Protohippus perditus* Leidy with certainty, and those of *P. pachyops* Cope and *P. mirabilis* Leidy with much probability.

Professor Cope further pointed out that the temporary dentition in these three-toed horses is more simple than that of the adult, in some cases resembling very closely the permanent dentition of the ancestral *Anchitherium* in molar structure. In this the horses differ from the higher Artiodactyla, where the temporary molars are equally complex or more so than the permanent molars.

OCTOBER 11.

Mr. CHARLES MORRIS in the chair.

Forty-three persons present.

A Hyena and other Carnivora from Texas.—PROF. E. D. COPE stated that he had during the past season while exploring the eastern front of the Staked Plains of Texas with a party of the Geological Survey of that State under Prof. W. F. Cummins, obtained the remains of some interesting Carnivora from the Blanco or Pliocene beds. One of these is a hyena nearly allied to the genus *Hyæna,* and the first species of this family found in America. It, however, differs from the typical genus in having a fourth premolar in the lower jaw, and probably in having a shorter blade of the sectorial tooth in the upper. He proposed the name *Borophagus* for the genus, and for the species the name *diversidens*. The third premolar is very large and robust, greatly exceeding the fourth in dimensions. The latter is low and molariform; the inferior canine is large. The measurements are as follows. Transverse diameter of canine alveolus 13 mm.; do. of posterior alveolus of pm. iii, 13 mm.; diameters of pm. iv; longitudinal 4 mm.; anteroposterior 10; transverse 8. Diameters of pm. iii; longitudinal 17 mm.; anteroposterior (partly restored) 28; transverse 15. The species is as large as the spotted hyena and was the scavenger of the Blanco Fauna.

Another interesting carnivore is a weasel of a new genus and species, which it was proposed to call *Canimartes cumminsii* after its discoverer. The genus *Canimartes* is allied to *Mustela*, differing only in the presence of two superior true molars. Metaconid of inferior sectorial well developed; talon of the same, trenchant. The species is as large as the fisher.

A third carnivore is a cat, provisionally referred to the genus *Felis* under the name of *F. hillianus*, after Prof. Robert T. Hill the well-known geologist. This cat is about the size of the cheetah, and has large canine teeth without grooves, and the feet are shorter than in modern cats.

On Hippa emerita.—DR. BENJAMIN SHARP exhibited dried specimens of *Hippa emerita* Linn. and called attention to the method of preparation. The animals, as soon as possible after capture and while yet alive, were placed in a 50% solution of corrosive sublimate and allowed to remain there for two days. They were then taken out, washed for a moment in pure water, and then dried. The advantage claimed was that the colors are very well preserved, which would not be the case had they first been placed in alcohol. He further called attention to the habits of this species, popularly known as the "mole crab," or "sand flea" and spoke of the mistake which some authors had made in stating that the animal burrowed into the sand head first. A. F. Verrill[1] says:—"but this species [*Hippa talpoidea*], burrows like a mole, head-first, instead of backward." A. Heilprin[2] remarks:—"the animal [*Hippa emerita*] is a remarkably rapid burrower, pushing itself head downward by means of its anterior or thoracic feet." Dr. Sharp called attention to the fact that the posterior pair of thoracic feet are bent upwards over the posterior part of the carapace and resemble, on superficial observation, antennæ. This has probably caused the posterior part of the animal to be mistaken for the anterior. He had carefully observed the method of burrowing of these animals during the last summer. The posterior feet were employed in loosening the sand by their rapid motion; the other limbs working forward push the animal backward into the sand, a method of progression common, more or less, to all decapods. He further called attention to the

---

[1] Report of the Invertebrates of Vineyard Sound, etc., Washington, 1873, 338 and 339.

[2] The Animal Life of our Sea Shore, Philadelphia, 1888, p. 95.